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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,262	08/24/2001	Benjamin P Milner	36-1470	2246

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EXAMINER

LE, BRIAN Q

ART UNIT PAPER NUMBER

2623

DATE MAILED: 08/25/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

GM

Office Action Summary

Application No.

09/914,262

Applicant(s)

MILNER, BENJAMIN P

Examiner

Brian Q Le

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

Art Unit: 2623

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The concept of the limitation “passing signals through a ... and excess acceleration components” is not clearly understood by one skilled in the art.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term “excess acceleration components” is not clearly understood by one skilled in the art. The Applicant needs to explain of how is this concept fit into the limitation as a whole.

Drawings

5. The drawings are of insufficient quality for publication (Note handwritten portions).

Art Unit: 2623

A proposed drawing correction or corrected drawings are required in reply to the Office Action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Grajski U.S. Patent No. 5,577,135 and Radcliffe U.S. Patent No. 3,818,443.

Regarding claim 1, Grajski teaches a handwriting recognition (FIG. 2) system comprising:

Means responsive to input analogue signals representative of movement of a handheld writing device (signals before digitized are analogue signals) (FIG. 3A-3B);

Sampling means (FIG. 5A, element 4) to provide signals representative of the acceleration (column 11, lines 40-50) of the writing device in at least x axis and y axis channels at a predetermined capture sampling rate (time series of x, y coordinates data or sample points) (column 11, lines 17-32); and

Filtering means (FIG. 7, element 80) to provide smoothing (FIG. 7, element 84) of the output whereby signals representative of movement of the pen over a period (time series of x, y coordinates data or sample points) (column 11, lines 17-32) are supplied to a classifier for comparison with template representative of characters formed (cluster or group together)

Art Unit: 2623

(column 16, lines 33-50 and column 17, lines 18-30). However, Grajski does not explicitly teach a filtering means to remove dc level components. Radcliffe teaches a handwriting recognition process (abstract) that responsive to input analogue signals (FIG. 2) wherein a filter removes direct current (dc) level components (column 4, lines 46-55). Modifying Grajski's method of handwriting recognition according to Radcliffe would able to remove the direct current level component to able to remove the unwanted frequencies at both ends of the frequency spectrum (column 3, lines 30-35). This would improve processing and therefore, it would have been obvious to one of the ordinary skill in the art to modify Grajski according to Radcliffe.

Regarding claim 2, Grajski teaches a handwriting recognition system in which the classifier uses a hidden Markov model for comparison purpose (column 6, lines 45-60).

For claim 3, Grajski further teaches a handwriting recognition system in which sampling means, filtering means and classifier are implemented in a digital computer environment (digitizing process) (column 6, lines 27-34).

Regarding claim 4, please refer back to claim 1 for the teaching and explanation.

CONCLUSION

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to handwriting recognition:

U.S. Pat. No. 6,556,712 to Loudon, teaches methods and apparatus for handwriting recognition.

Art Unit: 2623

U.S. Pat. No. 5,802,205 to Emico, teaches method and system for lexical processing.

U.S. Pat. No. 5,768,417 to Errico, teaches method and system for velocity-based handwriting recognition.

U.S. Pat. No. 5,854,855 to Errico, teaches method and system using metaclasses and polynomial discriminant functions for handwriting recognition.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 703-305-5083. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC Customer Service whose telephone number is 703-306-0377.

BL
August 12, 2004

A handwritten signature in black ink, appearing to read 'SAMIR AHMED', with a long horizontal line extending from the end of the signature.

**SAMIR AHMED
PRIMARY EXAMINER**